

Hercules Incorporated - Parlin

EPA ID Number: NJD002521961

Other (Former) Names of Site

None

Site Facts

Hercules, Inc. is located at 50 South Minisink Avenue in Parlin, New Jersey. The plant started operations in the early 1900's at a 670-acre site adjacent to the Sayreville watershed. Its main product through the years has been nitrocellulose, which was used for making explosives. In the 1940's, Hercules manufactured the pesticide DDT, which resulted in the contamination of the soils in the manufacturing area and the sediments in a brook that runs through the site. Four unlined landfills were operated on-site and received various types of waste materials. These landfills have a combined area of about 10 acres.

Contamination

Soil and groundwater has been contaminated as a result of manufacturing activities, operation of the unlined landfills, and spills. Groundwater is contaminated with tertiary-butyl alcohol and volatile organic compounds, including carbon tetrachloride and chloroform. The former DDT manufacturing operation resulted in DDT-contamination of soil and sediments in the brook.

What is Being Done

An investigation was conducted to delineate the extent of DDT-contaminated soil and sediments. Hercules installed an underground wall around the landfills to prevent contamination from migrating. The company also installed pumps between the underground wall and landfills to further contain the contaminated groundwater. The pumped groundwater is treated in the on-site wastewater treatment system and then discharged to the public sewer authority.

Another groundwater pumping system was installed to contain the tertiary-butyl alcohol contamination plume from migrating further. Studies have shown that this alcohol degrades naturally by adding oxygen-releasing chemicals and a particular kind of bacteria into the contaminated groundwater zone. A determination is being made concerning whether this type of approach would be adequate to address this groundwater problem.

A third groundwater pumping system was installed to control a carbon tetrachloride contamination plume. The contaminants are separated from the groundwater, collected, and then the water is pumped back into the ground.

What Remains To Be Done

Hercules will complete the characterization of the contamination and assess whether the site's current approach to removing the tertiary-butyl alcohol constituents is likely to work. Hercules must also complete the excavation of the contaminated sediment from the brook and put it into one of the on-site landfills. The landfills will then be closed by installing a plastic cover and creating an ongoing groundwater monitoring program.

The three groundwater pumping systems will operate indefinitely to remove contaminated groundwater and to prevent it from migrating further. The groundwater monitoring program will continue indefinitely to confirm that there is no migration of contaminated groundwater from the facility.

The land use and groundwater use at the site and the surrounding area will be restricted where contamination exceeds residential standards.

Site Repository

Copies of supporting technical documents and correspondence cited in the site fact sheet are available for public review at the following location:

New Jersey Department of Environmental Protection
Division of Solid & Hazardous Waste
Records Center
401 E. State Street, 6th Floor
Trenton, NJ 08625
Telephone: (609) 777-3373